



Customer information packet

FPM2538T-2/4

40HP, 3500RPM, 3PH, 60HZ, 286TS, 3954M, ODP, F1

A

Class -

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | ODP |
| Frame | 286TS |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 40.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 200.0 V @ 60 HZ 400.0 V @ 60 HZ |
| Agency Approvals | CSA EEV UL |
| Ambient Temperature | 40 °C |
| Auxiliary Box | NO AUXILLARY BOX |
| Auxiliary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 52.000 A @ 400.0 V 104.000 A @ 200.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 91.7 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Standard |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 52.0 a |
| Insulation Class | F |

Part detail

| | |
|--------------|------------|
| Revision | G |
| Type | AC |
| Mech. spec. | 39L35 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 39WGX945 |
| Layout | 39LYL035 |
| Eff. date | 11-14-2023 |
| CD Diagram | CD0104 |
| Poles | 02 |
| Leads | 12#10 |
| Proprietary | False |
| Created date | 03-13-2017 |

| | |
|-------------------------------|-----------------------|
| Inverter Code | Not Inverter |
| KVA Code | G |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 12 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3954M |
| Mounting Arrangement | F1 |
| Number of Poles | 2 |
| Overall Length | 23.56 IN |
| Power Factor | 91 |
| Product Family | Fire Pump Motor |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 1.625 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 3500 rpm |
| Speed Code | Single Speed |
| Starting Method | Wye Start - Delta Run |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | None |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

NP3454L

| | | | | | |
|------------------|--------------|-----------------|------|------------------|------------|
| CAT.NO. | FPM2538T-2/4 | CUST P/N | | I.P. | 23 |
| SPEC. | 39L035X945H2 | SER.NO. | | FRAME | 286TS |
| HZ | 60 | HP | 40 | RPM | 3500 |
| VOLTS | 200/400 | CODE | G | VOLTS | |
| AMPS | 104/52 | DES | B | AMPS | |
| EFF | 91.7 | SER.F. | 1.15 | PF | 91 |
| RATING | 40C AMB-CONT | DE BRG | 6311 | GREASE | POLYREX EM |
| BLANK | | ODE BRG | 6208 | MTR. WT. | 254 |
| | | CLASS | F | PH | 3 |
| | | ENCL | ODP | CC | 010A |
| HTR-VOLTS | | HTR-AMPS | | HTR-WATTS | |

Parts list

| Part number | Description | Quantity |
|---------------|--|----------|
| SA335519 | SA 39L035X945H2 | 1.000 ea |
| RA323730 | RA 39L035X945H2 | 1.000 ea |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 ea |
| 09CB2800A01 | ADAPTER MACH FOR 09CB3000 AND 10CB3000 | 1.000 ea |
| 19XW3118A08 | .31-18 X .50 HEX WASHER HEAD TAPTITE II | 2.000 ea |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 2.000 ea |
| WD1000B25 | GND LUG, BURNDY L125HP OR T&B L125HP-BB | 1.000 ea |
| 19XW3118G08 | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN | 1.000 ea |
| 10CB3000SP | KOBX, CAST W/2.00 LEAD HOLE | 1.000 ea |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 4.000 ea |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 ea |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH | 1.000 ea |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 ea |
| 39EP3202A01 | ENDPLATE MACH | 1.000 ea |
| XY3816A12 | 3/8-16 FINISHED NUT W/SERRATIONS | 8.000 ea |
| 10CB3500SP | CONDUIT BOX LID, CAST | 1.000 ea |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 ea |
| HW2501G17 | KEY, 3/8 SQ X 1.875 | 1.000 ea |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 ea |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.030 lb |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 ea |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 ea |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 ea |
| MG1025R44 | WILKOFAS, 784.109, CARMINE RED #3002 | 0.050 ga |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| HA3154A04 | THRUBOLT STUD 3/8-16 X 18.750 | 4.000 ea |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 ea |
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 ea |

| | | |
|-----------|--|----------|
| LC0104A01 | CONNECTION DIAGRAM | 1.000 ea |
| NP3454L | ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY) | 1.000 ea |
| 40PA1000 | PACKAGING GROUP | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/22 | 1.000 ea |
| LD7020E12 | LEAD SET, 10AWG, 12 LEAD, 20" LONG LEADS | 1.000 ea |

AC Induction Motor Performance Data

Record # 54900

Typical performance - not guaranteed values

| Winding: 39WGX945-R001 | | Type: 3954M | | Enclosure: OPSB | |
|-------------------------------|--------------------------|----------------------------|--|-------------------------|--|
| Nameplate Data | | | 400 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 40 | Full Load Torque | 60.6 LB-FT | | |
| Volts | 200/400 | Start Configuration | direct on line | | |
| Full Load Amps | 104/52 | Breakdown Torque | 193 LB-FT | | |
| R.P.M. | 3500 | Pull-up Torque | 71.9 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 91.3 LB-FT | |
| NEMA Design Code | B KVA Code | G | Starting Current | 330 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 12.2 A | | |
| NEMA Nom. Eff. | 91.7 Power Factor | 91 | Line-line Res. @ 25°C | 0.172 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 63°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 79°C | |
| | | | Locked-rotor Power Factor | 27.2 | |
| | | | Rotor inertia | 1.38 LB-FT ² | |

Load Characteristics 400 V, 60 Hz, 40 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 68 | 84 | 89 | 91 | 91 | 90 | 91 |
| Efficiency | 93.2 | 94.1 | 93.3 | 92 | 90.3 | 88.5 | 91 |
| Speed | 3580 | 3557 | 3532 | 3504 | 3472 | 3437 | 3485 |
| Line amperes | 17.7 | 27.6 | 39.2 | 52.1 | 66.4 | 81.3 | 60.7 |

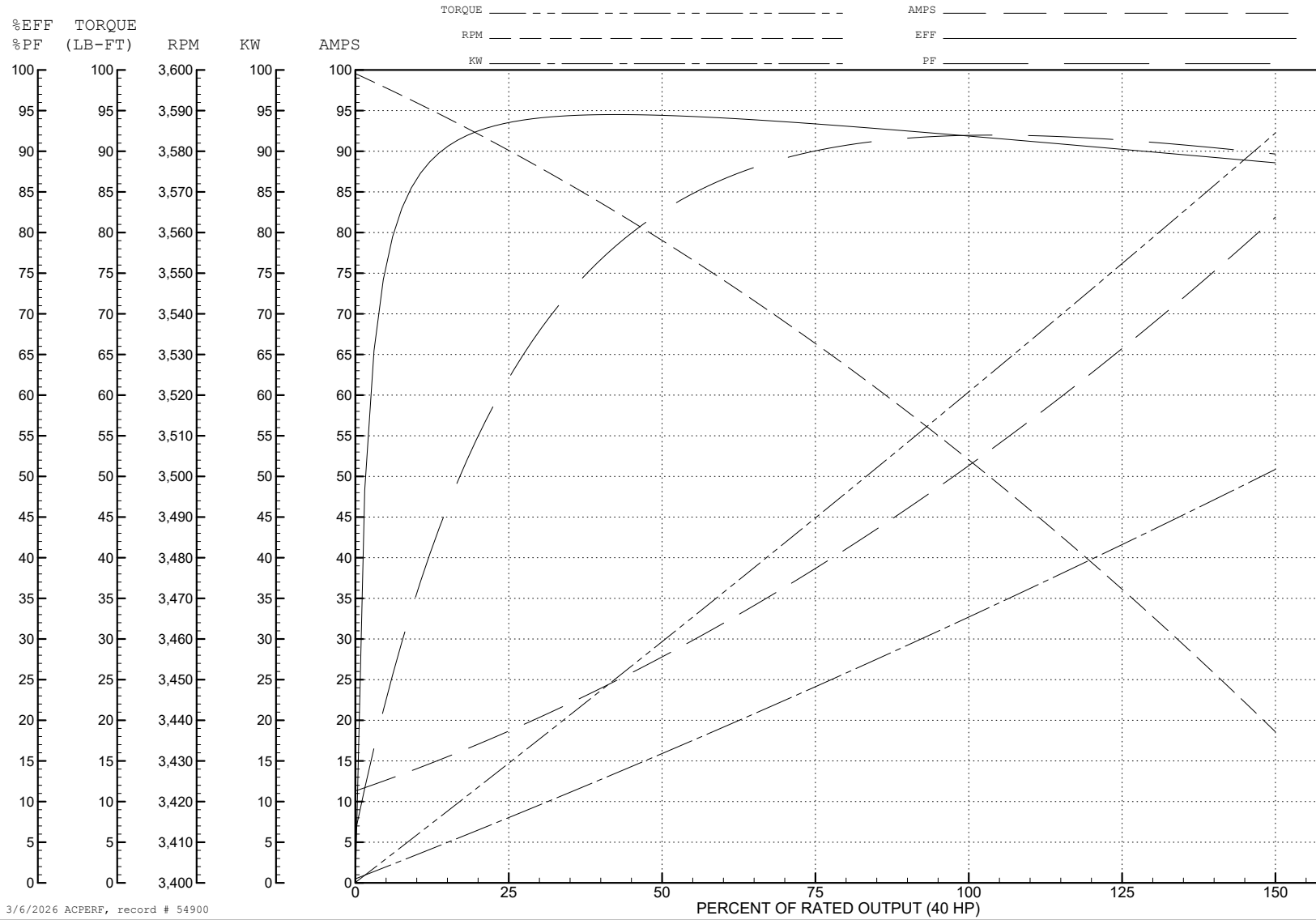
ABB Motors and Mechanical Inc.

WINDING # 39WGX945

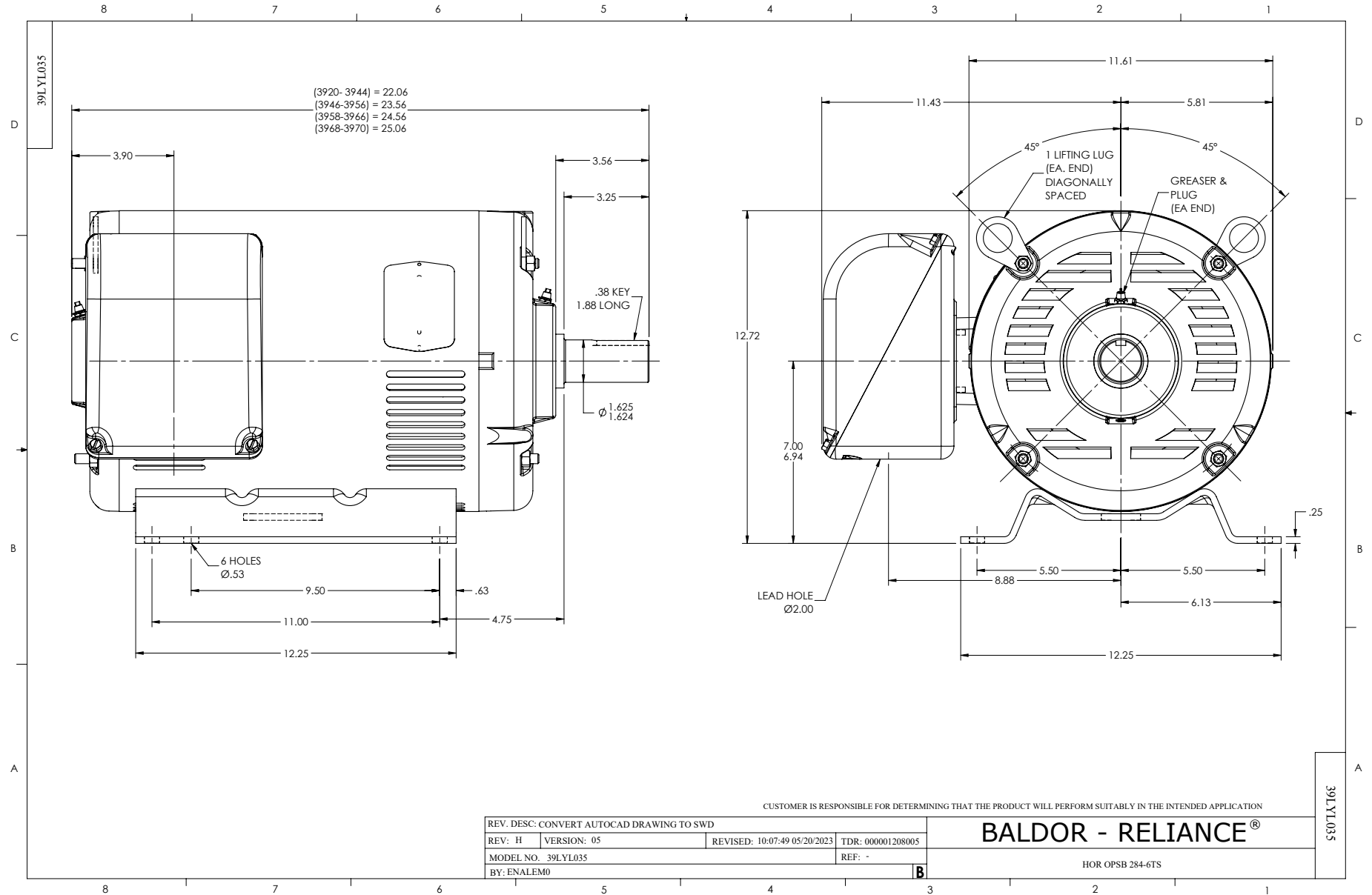
Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3500 RPM 400 V 3954M

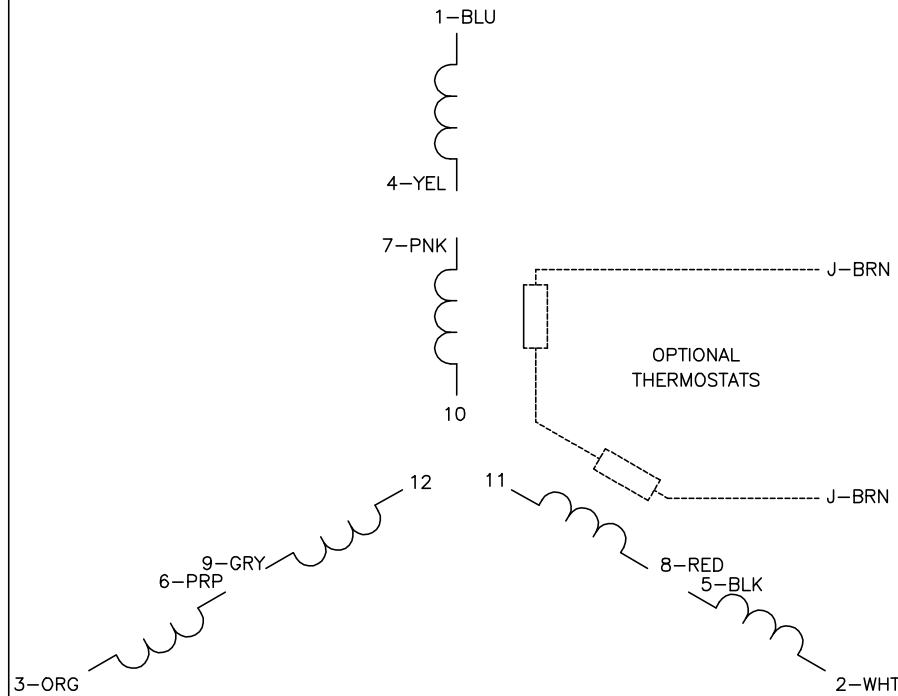
TORQUES (LB-FT): PO=193 PU=71.9 LR=91.3 LRA=330



3/6/2026 ACPERF, record # 54900

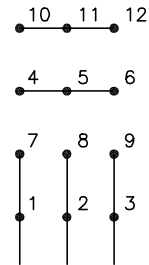


CD0104



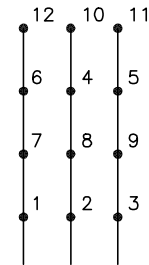
LOW VOLTAGE

START (2Y)



LINE

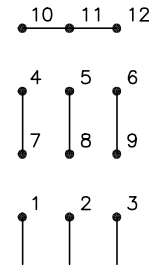
RUN (2D)



LINE

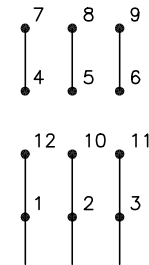
HIGH VOLTAGE

START (1Y)



LINE

RUN (1D)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0104

| | | |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00008\377 | REVISED: 09:02:55 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

SH 1 of 1